



2-Wheel Self-balancing Scooter

User Manual

Instruction

Security Statements

1. Please confirm that you have the full capacity for civil rights and civil conducts, and you have already read this manual before using our scooters. People under age of 18 are not recommended to use the product.

2. There is a risk when you use any products, that includes two wheel Freefeet scooters. Therefore, you should have a better understanding about the instruction, and be caution while driving.

3. You may confront many unknown issues while you are driving, so keep caution all the time. If customers do not follow the instruction, our company does not responsible for results.

4. Do not speed up while driving, if at risk of falling down, please put the personal safety at the first place.

The basic principle of self-balancing scooter

1. Moving forward or backward: Freefeet scooter realizes the moving forward or backward is base on its center of gravity. When the deviation degree is large, then the speed increases, and vice versa.

2. Leaning your body a little bit, hold the handle bar, and the body gesture must be correct, then you can be safety turning when the speed is fast. Because of turning creates a centrifugal force while you are driving, you can only get rid of it when you are familiar with it.

Power on &Power off

1, Get ready: standing on floor and use one foot to keep the weight point of scooter vertically to the ground.

2.Turn on the power, one hand hold the turning pipe to keep the pedal in horizontal (It can be adjusted by reset the power).Turn on the power, when you hear buzz and the screen is working, then it is safety to drive. However, please charge the power when it is below 20%.

Note: You must guarantee you have set the horizontal states for scooters before you turn on the power, ,because our scooters may recognize the current position as the initial horizontal level.

Warning:

1. *Preparation:* If it is your first time to drive the Freefeet self-balancing scooters, please do not forget to read instruction, as well as wearing the accessories, such as helmet, glove.

2, *playground:* The scooter could be played in the elevator type office buildings, airports, railway, community patrolling, golf course, plaza patrolling, traveling, personal entertainment, indoor area, large tourism district; Driving in outdoor dangerous roads, highways and motor vehicle road is banned and very dangerous.

3, *Training before use:* all the users must be trained before driving alone; the coach needs to control the center of gravity, it will be much stable. For beginners, they need to learn how to stand on the scooter to control, such as moving forward, moving backward and so on. It is better to keep feet separate in a certain distance to control the weight point; free ride must be come true after a series of strictly trainings.

4, *The principle of self-balancing scooters:* The scooter is controlled by good coordination, it could be dangerous, so please be careful. The skill needs to be gradually improved, that is mainly focus on controlling the center of gravity, and learning to keep balance.

5, Driving skills

1) Default of maximum speed is 18 km/h

2) Driving: Slightly leaning forward, the scooter is running forward; Leaning back will lead to stop or moving backward. Movement must be soft and avoid the fierce shaking; when you pivot the turning pipe left, the scooter turns left; when you pivot the turning pipe right, the scooter turns right.

3) Halt: controlling the speed till stop, hold the handles, the first leg left pedal and step back, then landing on both feet while steady, then turn off the power, and keep the scooter stopping; Do not turn off the power while person is standing on the scooter.

4) Turning: when scooter is turning, it must slow down, and the turning angle should not be large; keep you body aligned with the turning pipe.

5) Downhill: when the scooter go downhill, the speed should not fast, it must slow down, and keep the center of gravity backwards.

6) When the wheel get stuck in terrain or objects, don't force yourself to go through repeatedly. If you hear the big sounds from inside, that means motor output is overload, motor and pilot is heated, and could be burnt out over time.

6, The parking tips

1) when you need to temporarily parking the self-balancing scooter, find a stair or something else that can stop the moving. When you do not need to play the scooters, just turn off the power and drop the bracket.

2) the power should be turned off when the scooters are in stock, transporting, as well as not using.

7, Irresistible factors

1) Driving a scooter is similar to driving a car, you need to see the road ahead, are prepared ahead of time.

2) When you can not go through obstacles (steps), you must move back slowly, a crash may damage your scooters.

- 3) You must turn off the power when the water spilled into scooter, do not drive the scooter again, because it will expand the problem.
- 4) The net weight of our two wheels scooter is 43KG, you can bring it to home even there is no power inside, and waiting for the guidance of sales service staff.

Congratulations, you own a Freefeet scooter

At this moment, you are not only saving the petrol fees, but also contributing to the green environment.

You may find out some functions and features in the manual are not corresponding to any products you purchased. However, some figures have already been approved by the law, our company has authorized to modify any figures without telling customers.

To ensure the best Freefeet driving experience, please read the instruction and learn how to steer such future transporter. Please keep the manual for future use.

Read the manual carefully, and know the basic responsibilities and warranties, to make sure the scooter working at the optimal state. We really wish you enjoy the driving.

Safety Instruction

- ▲ For adults use only
- ▲ Please abide to local traffic regulations
- ▲ Please wearing a helmet, knee and elbow pads for safety purposes.
- ▲ Please read the relevant guidelines in this manual

It is hard for us to list all the notices about cases and scooter maintenance, therefore, driving carefully and pay attention to the surrounding crowd.

**The user manual contains important safety information.
Please read carefully.**

Table of Content

Chapter I Introduction	7
Chapter II component analysis	8
Explanation of using handle bar, turning pipe and pedal switch, along with other devices on the pedal	
Chapter III mount/dismount	10
Introduce how to turn on and the mount on your scooter	
Chapter IV Driving	11
Introduce how to lean your body to go forward, parking, reversing and turning, etc.	
Chapter V Charging	14
Chapter VI Maintenance	15
Chapter VII Notice	16
Chapter VIII Technical Parameters	17
Chapter IX Warranty	18

CHAPTER I

Introduction

Freefeet self-balancing scooter is built on principle of “dynamic stability”, in other words, it is the balance capability of the scooter. The build-in solid state gyroscope can judge the body state of the scooter, then the signal goes through the superior CPU and transfer into codes, that drives the motors get balancing effect.

Because of Freefeet is an innovative transporter, so it is hard to be categorized by using traditional method. Someone considers Freefeet is a superior two wheels unicycle, someone considers it is one sort of stand up scooters, but it is in design of single axis double, which is different from biaxial wheel traditional scooters. Therefore, it is suitable in formal occasion, such as official road regulations, there is another name for Freefeet, which is called electric personal assistive mobility device (EPAMD), that is known as electric self-balancing scooter.

The scooter has two wheels, and the width is less than the width of adult's shoulders, and it is weigh 55KG, battery driven. There is no need brake system or throttle lever while it is driving. When the driver lean front, the scooter move forward; when the driver keeps body straight, it will stop. Freefeet utilize the principle of dynamic balance, while the body is moving, the center of gravity will be continuously changed and finally reach the balance. It is similar to human lose balance when he leans forward, however, the organs will send a signal to brain, which will send the code of moving feet to keep balance. Freefeet utilizes the same principle and copy human's complex balance action. In addition, it has low cost, flexible and convenient

features, and its energy is from three rechargeable maintenance free batteries. It can be used 5 hours if it is fully recharged, then you just need to recharge it again. The driving miles is depend on road condition, for example, grass and slope road will consume more power.

CHAPTER II

component analysis



1. Handle Bar/Turning Pipe

(1) Used to control and make the Freefeet turn left or right, turn around and rotated 360 degrees. It also has support function and can play a supporting role in keeping body balance.

(2) The driver can adjust the turning pipe according to his or her height, it is better to adjust the handle bar in the height of belly.

(3) Lock the turning pipe after adjustment, then turn the handle bar to confirm that it has been locked.

(4) The adjustment of turning pipe and handle bar should be finished before turning on the power.

(5) The turning pipe can be easily disassembled.

2. Power Switch

(1) The power switch is used to turn on and turn off the power, when the power switch is on, the Freefeet will finish the initialization-settings.

(2) It is dangerous to stand on Freefeet without turning on the power.

3. Pedal panel

(1) The pedal panel can be activated, it can open and shut down the build-in safety switch, and it can check whether someone is on scooter.

CHAPTER III

Mount/dismount

1.The correct mounting practice

One hand hold the turning pipe(refer to pictures 2,3&4), then hold the handle bar tightly with both hands(refer to picture 5).



Picture 2



Picture 3



Picture 4



Picture 5

Must make sure the pedal panel is in horizontal level before turn on the power.

2.The Wrong mounting practice(refer to pictures 6&7)

Freefeet will defaults it is at original position is at horizontal level when power is turning on, so it is hard for driver to steer Freefeet if the pedal is not parallelling to the ground initially. The original position can be reset by restart the scooter. For example, you can turn off power and adjust the pedal at the horizontal level, then restart for a trial, you can repeat the process until you master it.



Picture 6



Picture 7



Picture 8

3.The correct operating practice(refer to picture 8)

Make sure the pedal of scooter is at horizontal level, then turning on the power.

CHAPTER IV

Driving

Driving the Freefeet 2-wheel self-balancing scooter is totally different from anything you may have driven before. Freefeet does not have traditional brakes, accelerator and gear system. Please read the user manual or follow an experienced person's instruction before your first riding.

Once you enjoy the fun of driving Freefeet, you will be addicted in it, so you will be benefited from following instructions.

1. Stand on Freefeet

After turn on the switch, holding the handlebar with your left hand while making your left foot on the pedal (refer the picture 9);Then holding the handlebar with your right hand while making your right foot on the pedal. The order is like this: left hand -left foot -right hand -right foot. At this time you have stood on the balanced scooter. Stand straight without do any action, just relax and keep your balance, Freefeet will stay at its original place(refer to picture 10)



2. Driving straight forward

Leaning your body forward slowly (forward the center of gravity), this will make the Freefeet moving forward(refer to picture 11). The driving speed is controlled by the leaning angle of your body, the more you leaning, the faster you will be. However, the less you leaning, the slower you will be. For stable driving, we suggest leaning forward slowly, it is dangerous to lean forward suddenly, which makes the driver lose the center of gravity.



3. Halting and Driving Backward

We suggest not driving backward, because it is not safety for the driver. The turning radius of Freefeet is zero, so you can easily achieve 360° rotating in original place. We suggest that when you want to slow down or stop, you can lean backward or squat down (the center of gravity backward). Leaning backward slowly or smoothly is helpful to slow down and halt the scooter (refer to picture 12).



Picture 12

Tips: Driving forward in a straight line you just simply push the handle forward, then push backward to slow down or stop.

4. Turning at original Place, Turn Around and Rotate 360 degrees

It is easy to turn a direction when driving, keep the turning pipe/handle bar left-forward or right-forward, at the same time keep your body aligned with turning pipe, then you can easily achieve any turnings. After turning, you only need return the pipe to the original position and stand straight to halt the scooter (refer to pictures 13 and 14).



Picture 13



Picture 14

5. Turning while driving

The Freefeet's turning scope is calculated automatically according to the driving speed, when the speed is fast, the turning angle will be small to keep safety. Coordination is important in turning while driving. To turn left, the turn pipe should be swung smoothly to the left and your body leans left at the same time. The turning radius of Freefeet is decided by both the leaning scope of turning pipe and your body.

Tips: The actual turning is finished by the combination of actions above, some one says driving the Freefeet is like a combination of riding horse and skating. Freefeet is also called a sensory scooter. Which means driving Freefeet according to his/her actions and gestures.

6. Driving in Bad Weather

Please do not drive Freefeet on rainy days, because Freefeet is not water resistance. The circuit-board and the motors are easily damaged if water drift in. Freefeet can be driven in the snow and ice terrain. Freefeet has night lighting function. While driving at the pedestrian, bicycle lane or public occasions, please complying with local traffic regulations.

CHAPTER V

Charging

It is need to recharge on time when the LED display the power is less than 20%.

Charger is getting heat while working, so please place it indoors or in cool places.



Picture 15

Please make sure the battery is connected with the charger when charging the power. Otherwise, it will cause power consumption, which is bad for the battery.

CHAPTER VI

Maintenance

1、 The Battery maintenance

It is needed to recharge on time when the LED display power is less than 20%. Keep the charging time no more than 15 hours. If you are not using Freefeet for long periods, keep it charging, excessive discharge and re-charge is bad for the battery's life and it can even lead to battery waste. (Suggestion: please keep it charging every month even you don't use it)

2、 When not driving Freefeet

Please ensure the power is off and the lock is on, to avoid accidental starting.

3、 Replacing Fuse

The fuse of the Freefeet is using a car fuse. The fuse may be burnt if it is overloading. Check the fuse if it is burnt, firstly, open the fuse cover at the back of the body with a screwdriver, and replace a new fuse.

4、 Tighten the screws of Tire

Pay attention to the screws on wheels and check regularly, if it is loosen ,please use a 21mm spanner to tighten screws.

5、 Maintenance of Tire

Normal pressure is the basic to guarantee the safety driving.The standard tire pressure is 250kpa. It is necessary to check the tire pressure regularly, inflation or excessive inflation will cause unequal tire abrasion, which influences the power saving. Checking if there is any cuts or splits on tires to avoid the accident.

CHAPTER VII

Notice

1、 Keeping pedal of Freefeet horizontal

It is hard for the driver to stand on Freefeet if the pedal are not horizontal. If the turning pipe is not vertical, pedal may not be paralleling to the ground either, power switch can be adjusted to keep the pedal in balance.

2、 Parking the Freefeet

When you want to park Freefeet, you can turn off the power supply and put down the bracket.

3、 Accidental water inflow

Turn the power off immediately if Freefeet drops into water in accident. Do not drive it again! The Freefeet weights 43KG(56KG off-road).You can bring it home easily and connect us, we will offer you the guidance of after sale service.

CHAPTER VIII

Technical parameters

Charging Time	8H—10 H
Maximum Power	1600 watts (2*800w/pc)
Wheel	12 in / 26 cm (Aluminum Alloy Rim)
Tire	17 in / 43 cm vacuum resistance of puncture
Dimensions	68*43*125 cm
Voltage	100 v-240 v
Battery	PB,24V,28Ah
Maximum load	100 kg
Net weight	43 kg
Motor	brush DC Motor
Maximum climb capability	15 degree
Minimum turning radius	0
Maximum cruising speed	18 km / h
Maximum Mileage (After full charging)	30-35km
Lifetime of battery	1-3 years
Height of handle	100-125 cm adjustable
Height of pedal	10inch/ 26cm
Specification of pedal	11.5×25 in / 16×40 cm
Standard Pressure	250 kpa

CHAPTER IX

Warranty

Dear customers, our after-sales service is according to the following terms and conditions:

1. Deadline of products is refer to the following <<Warranty>>
2. In of period of validity, customers enjoy the right to repair, replace products according to regulations, it shall be conducted by the invoice and warranty card
3. Within 7 days from the selling date, consumers ask to return the money without any reasons. Once Freefeet technology company confirms the products are complete, and not influence the second sales, the customer will be refunded 70% of consumer purchases, the remainder is used as the compensation for Freefeet technology Co.Ltd in the process of the loss.
- 4、 After-sales notice:
 - 1) Purchase date is based on date of offering effective documents
 - 2) Warranty card and purchasing documents should be sent to repairing station for after sales repairing.
- 5、 After-sales fees and instructions of spare parts damaged
 - 1) Company undertakes all the after sales fees during the warranty period.

2) The warranty of new replaced spare parts can be still extended for 3 months if warranty period has been exceeded.

6、 No guarantee for the following cases, but enable charges for repairing

1) Warranty period is expired.

2) Product serial number has been damaged

3) The products on the warranty card does not match the damaged products.

4) Artificial damage without following the instructions.

5) Damage caused by Irresistible forces.

Warranty

No.	Parts Name	Warranty period	Warranty Range
1	Battery	12 months	To remove the damaged battery plugin, use other charger, water drift in or artificial factors will not be warranty
2	Motors and decelerator	12 months	Unauthorized repairing, water drift in and artificial damage will not be warranty
3	control system	12 months	Unauthorized repairing, modification, artificial damage will not be warranty

4	charger	12 months	Unauthorized repairing, water inflow, missing parts and damaged by charging other vehicle will not be warranty
5	Turning pipe	12 months	Modified, bending, crash, surface scratch, the lack of parts and other artificial damages will not be warranty
6	Handle	6months	Artificial damage broken, scratched will not be warranty
7	Pedal	6months	Abnormal use, artificial damage or modified, the damage caused by improper use will not be warranty
8	Tire and wheel	6months	Appear crack, air leakage and so on belong to the warranty scope
9	Remote control	6months	Abnormal use, artificial damage or modified, the damage caused by improper use will not be warranty
10	casing	6months	No crash, crackling paint, de-soldering belong to the warranty scope

Warranty Card

Category:

Client Name		Purchase Date	
Client Address			
Product No.		Invoice No.	
Scooter No.			
Distribution/Agent (Chapter)			

Warranty Record:

Warranty Date	Warranty Content	Remarks

Product List

No .	Product Name	Unit	Quantity	No	Product Name	Unit	Quantity
1	2-wheel scooter	pc	1	9	Advertising page	pc	
2	Charger	pc	1	10	Picture Album	pc	1
3	Helmet	pc	1	11	keys	pc	2
4	pads	pc	1	12	Bag	pc	
5	User Manual	pc	1	13	Shelf kit	pc	
6	Warranty Card	pc	1	14	Bell	pc	
7	Fuse	pc	4	15	Flash Light	pc	
8	Tool Box	pc	1	16	Remote Control	pc	2

Please fill out and return to us

Name		Purchase Date	
Address			
Model		Invoice No.	
Scooter Number			
Distribution/ Agent (Chapter)			
Manufacturer	Shenzhen Freefeet Technology Co.,Ltd	Hot-line:400-11400-08	
Address	216, 63 Building, Majialong Industrial,88# Daxin Road,Nanshan District,SZ		
Website	www.e-freefeet.net	Email	oye@efreefeet.com